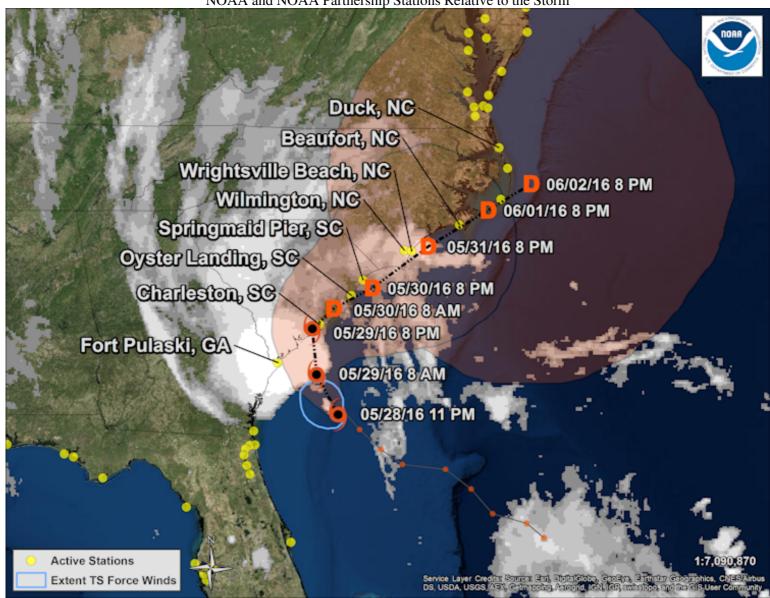




Tropical Storm BONNIE QuickLook Posted: 00:00 EDT 05/29/2016

NOAA and NOAA Partnership Stations Relative to the Storm



### Storm Analysis

As of 05/29/2016 00:00 EDT, water levels from Georgia to Beaufort, NC are slightly elevated and range from 0.5 to 1.3 ft. above normal tide levels. Winds are rising at most stations across the region, with gusts up to 30 kts. Barometric pressure continues to be somewhat steady across the region at this time.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:CMF

### SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM BONNIE ADVISORY NUMBER 6 NWS NATIONAL HURRICANE CENTER MIAMI FL 1100 PM EDT SAT MAY 28 2016

...BONNIE A BIT STRONGER BUT THE MAIN THREAT IS HEAVY RAINFALL ACROSS COASTAL SOUTH CAROLINA...

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

None.

#### SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

\* Savannah River to Little River Inlet South Carolina

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area, in this case within the next 12 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

### **DISCUSSION AND 48-HOUR OUTLOOK**

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At 1100 PM EDT, the center of Tropical Storm Bonnie was located by an Air Force Reserve Hurricane Hunter aircraft about 120 mi SE of Beaufort South Carolina or about 130 mi SSE of Charleston South Carolina. Bonnie is currently stationary. A motion toward the north-northwest is expected to begin overnight, followed by a turn toward the north as the center of Bonnie moves near the coast in the warning area on Sunday. A slow northeastward motion near the central and northern coast of South Carolina is expected Sunday night and Monday.

Data from the aircraft indicate that maximum sustained winds have increased to near 45 mph with higher gusts. Little change in strength is expected overnight. Some weakening is expected to begin by late Sunday.

Tropical-storm-force winds extend outward up to 70 miles, mainly to the northwest of the center.

The latest estimated minimum central pressure based on data from the aircraft is 1008 mb.

#### HAZARDS AFFECTING LAND

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RAINFALL: Bonnie is expected to produce total rainfall accumulations of 2 to 4 inches with maximum amounts around 6 inches from central and eastern South Carolina to the Georgia border. Rainfall accumulations of 1 to 3 inches are expected across southeastern North Carolina.

WIND: Tropical storm conditions are expected to first reach the coast within the warning area overnight or early Sunday.

STORM SURGE: Storm surge inundation of 1 to 2 feet above ground level is possible within the tropical storm warning area during the next high tide on Sunday morning.

SURF: Bonnie is expected to produce life-threatening surf and rip current conditions along portions of the southeastern United States coast through the weekend. Please consult products from your local weather office.

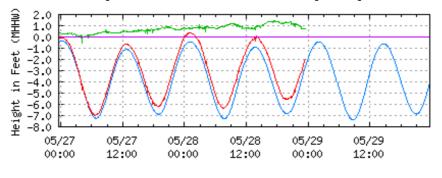
TORNADOES: An isolated tornado will be possible late tonight and early Sunday over the immediate South Carolina coastal region.

Forecaster Brennan

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Fort Pulaski - Water Level, Fort Pulaski - Winds, Charleston - Water Level, Charleston - Winds, Charleston - Barometric, Oyster Landing (N Inlet Estuary) - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Winds, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wilmington - Water Level, Wilmington - Barometric, Beaufort - Water Level, Beaufort - Winds, Duck - Water Level, Duck - Winds

### NOAA/NOS/CO-OPS <u>8670870 Fort Pulaski, GA</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

Last Observed Sample: 05/28/2016 23:24 (EDT). Data relative to MHHW Observed: -2.04 ft. Predicted: -2.73 ft. Residual: 0.69 ft. Historical Maximum Water Level: Oct 15 1947, 3.40 ft.

Next High Tide: 05/29/2016 02:06 (EDT), -0.43 ft.

#### $\frac{NOAA/NOS/CO\text{-}OPS}{\text{Wind Speed}} \neq \frac{8670870\ Fort\ Pulaski,\ GA}{\text{Gusts}}$ 30 360 25 direction (true) speed (knots) 270 20 15 180 10 90 5 0 05/27 05/27 05/28 05/28 05/29 05/29 00:00 00:00 12:00 00:00 12:00 12:00

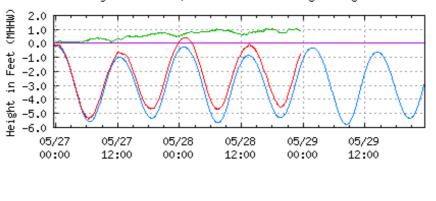
Last Observed Sample: 05/28/2016 23:24 (EDT) Wind Speed: 12 knots Gusts: 16 knots Direction: 339° T

gusts

speed

direction

# NOAA/NOS/CO-OPS <u>8665530 Charleston, SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) (Obs-Pred) MHHW (Observed WL (Obs-Pred) MHHW (Obs-Pred)

Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -0.73 ft. Predicted: -1.61 ft. Residual: 0.88 ft. Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 05/29/2016 01:49 (EDT), -0.30 ft.

#### NOAA/NOS/CO-OPS 8665530 Charleston, SC Wind Speed / Gusts / Direction 30 360 25 direction (true) speed (knots) 270 20 15 180 10 90 5 Ô 05/29 05/27 05/27 05/28 05/28 05/29 00:00 12:00 00:00 12:00 00:00 12:00

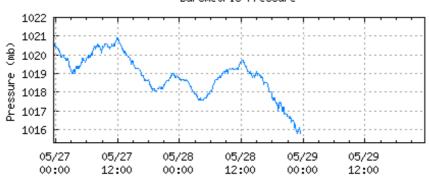
Last Observed Sample: 05/28/2016 23:30 (EDT) Wind Speed: 5 knots Gusts: 12 knots Direction: 344° T

gusts

direction

speed

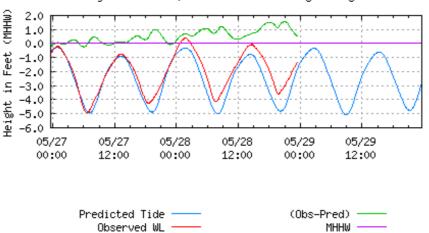
### NOAA/NOS/CO-OPS <u>8665530 Charleston</u>, <u>SC</u> Barometric Pressure



barometric pressure —— Last Observed Sample: 05/28/2016 23:30 (EDT)

Barometric Pressure: 1015.9 mb

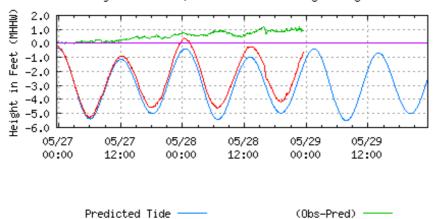
### NOAA/NOS/CO-OPS <u>8662245 Oyster Landing (N Inlet Estuary)</u>, <u>SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 05/28/2016 16:06 (EDT). Data relative to MHHW Observed: -0.61 ft. Predicted: -1.64 ft. Residual: 1.03 ft.

Historical Maximum Water Level: Aug 26 2011, 2.40 ft. Next High Tide: 05/29/2016 02:44 (EDT), -0.33 ft.

## NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



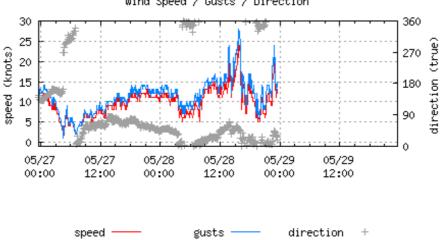
Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -0.62 ft. Predicted: -1.52 ft. Residual: 0.90 ft.

MHHW

Observed WL

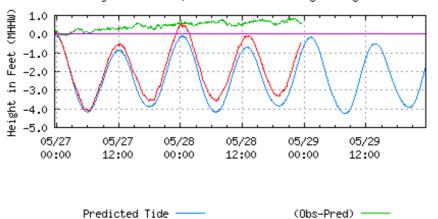
Historical Maximum Water Level: Jan 1 1987, 3.65 ft. Next High Tide: 05/29/2016 01:32 (EDT), -0.38 ft.

#### NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Wind Speed / Gusts / Direction



Last Observed Sample: 05/28/2016 23:30 (EDT) Wind Speed: 12 knots Gusts: 15 knots Direction: 18° T

## NOAA/NOS/CO-OPS <u>8658163 Wrightsville Beach, NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



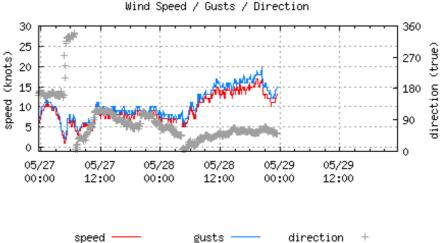
Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -0.36 ft. Predicted: -0.95 ft. Residual: 0.59 ft.

MHHW

Observed WL

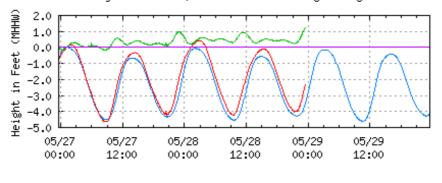
Historical Maximum Water Level: Sep 25 2008, 2.81 ft. Next High Tide: 05/29/2016 01:17 (EDT), -0.17 ft.

### NOAA/NOS/CO-OPS <u>8658163 Wrightsville Beach, NC</u> Wind Speed / Gusts / Direction



Last Observed Sample: 05/28/2016 23:30 (EDT) Wind Speed: 13 knots Gusts: 14 knots Direction: 49° T

### NOAA/NOS/CO-OPS 8658120 Wilmington, NC Preliminary Water Level, relative to Mean Higher High Water(MHHW)



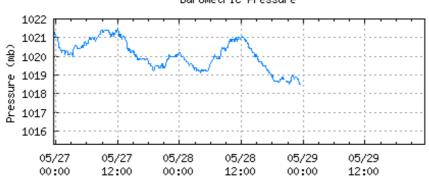
Predicted Tide (Obs-Pred) Observed WL

Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -2.19 ft. Predicted: -3.45 ft. Residual: 1.26 ft.

MHHW

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. Next High Tide: 05/29/2016 03:10 (EDT), -0.13 ft.

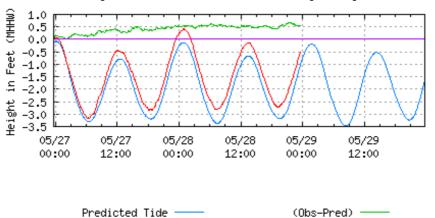
#### NOAA/NOS/CO-OPS 8658120 Wilmington, NC Barometric Pressure



barometric pressure

Last Observed Sample: 05/28/2016 23:30 (EDT) Barometric Pressure: 1018.5 mb

## NOAA/NOS/CO-OPS <u>8656483 Beaufort, NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



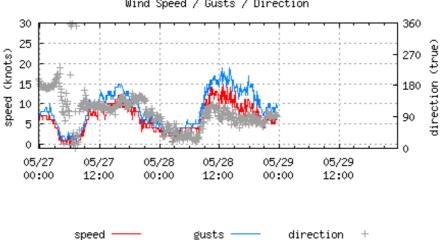
Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -0.53 ft. Predicted: -1.07 ft. Residual: 0.54 ft.

MHHW

Observed WL

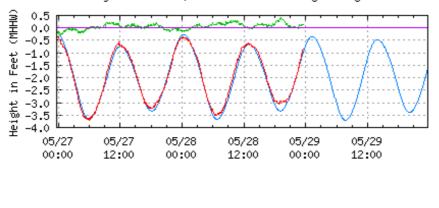
Historical Maximum Water Level: Sep 14 2005, 3.01 ft. Next High Tide: 05/29/2016 01:46 (EDT), -0.19 ft.

#### NOAA/NOS/CO-OPS <u>8656483 Beaufort, NC</u> Wind Speed / Gusts / Direction



Last Observed Sample: 05/28/2016 23:30 (EDT) Wind Speed: 6 knots Gusts: 9 knots Direction: 92° T

## NOAA/NOS/CO-OPS <u>8651370 Duck, NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

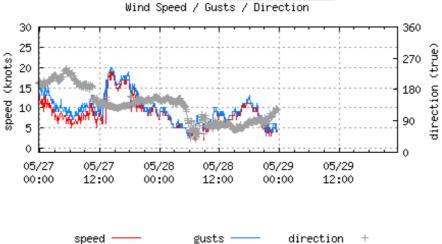


Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

Last Observed Sample: 05/28/2016 23:30 (EDT). Data relative to MHHW Observed: -0.87 ft. Predicted: -1.02 ft. Residual: 0.15 ft. Historical Maximum Water Level: Sep 18 2003, 4.13 ft.

Next High Tide: 05/29/2016 01:17 (EDT), -0.35 ft.

### NOAA/NOS/CO-OPS 8651370 Duck, NC



Last Observed Sample: 05/28/2016 23:30 (EDT) Wind Speed: 4 knots Gusts: 4 knots Direction: 123° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8670870	Fort Pulaski, GA	05/28/2016 23:24 (EDT)	-2.04 ft	-2.73 ft	0.69 ft	0.36 ft
8665530	Charleston, SC	05/28/2016 23:30 (EDT)	-0.73 ft	-1.61 ft	0.88 ft	0.43 ft
8662245	Oyster Landing (N Inlet Estuary), SC	05/28/2016 16:06 (EDT)	-0.61 ft	-1.64 ft	1.03 ft	0.40 ft
8661070	Springmaid Pier, SC	05/28/2016 23:30 (EDT)	-0.62 ft	-1.52 ft	0.90 ft	0.38 ft
8658163	Wrightsville Beach, NC	05/28/2016 23:30 (EDT)	-0.36 ft	-0.95 ft	0.59 ft	0.55 ft
8658120	Wilmington, NC	05/28/2016 23:30 (EDT)	-2.19 ft	-3.45 ft	1.26 ft	0.44 ft
8656483	Beaufort, NC	05/28/2016 23:30 (EDT)	-0.53 ft	-1.07 ft	0.54 ft	0.42 ft
8651370	Duck, NC	05/28/2016 23:30 (EDT)	-0.87 ft	-1.02 ft	0.15 ft	-0.37 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce